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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/980,210	11/30/2001	Fumihiko Iwata	111227	9985

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EXAMINER

MURPHY, DILLON J

ART UNIT	PAPER NUMBER
2625	

DATE MAILED: 05/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/980,210	Applicant(s) IWATA ET AL.	
	Examiner Dillon J. Murphy	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/3/2006 and a supplemental filed 5/3/06.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11, 13-18, 21-32, 34-39, 41, 44-52, 54-56, 76, 96 and 97 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-11, 13-18, 21-32, 34-39, 41, 44-52 and 54-56 is/are allowed.
- 6) ☐ Claim(s) 76, 96 and 97 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/12/05, 12/27/05</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

- This action is responsive to the amendment filed on March 3, 2006, and the supplemental amendment filed May 3, 2006.
- Claims 1-11, 13-18, 21-32, 34-39, 41, 44-52, 54-56, 76, 96, and 97 are pending. Claims 12, 19, 20, 33, 40, 42, 43, 53, 57-75, and 77-95 have been canceled. Claim 97 is new.
- Amendments to the specification are acknowledged and accepted.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 96 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 96 is drawn to functional descriptive material NOT claimed as residing on a computer readable medium. MPEP 2106.IV.B.1(a) (Functional Descriptive Material) states:

“Data structures not claimed as embodied in a computer-readable medium are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer.”

“Such claimed data structures do not define any structural or functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure’s functionality to be realized.”

Claim 96, while defining a computer program, does not define a “computer-readable medium” and is thus non-statutory for that reasons. A computer program can

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range from paper on which the program is written, to a program simply contemplated and memorized by a person. The examiner suggests amending the claim to embody the program on "computer-readable medium" in order to make the claim statutory.

"In contrast, a claimed computer-readable medium encoded with the data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory." - MPEP 2106.IV.B.1(a)

Allowable Subject Matter

Claims 1-11, 13-18, 21-32, 34-39, 41, 44-52, and 54-56 are allowed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 76, 96, and 97 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yacoub (US 6552813) in view of Kato (US 6760118) and further in view of Mestha et al. (US 6744531), hereafter Yacoub, Kato, and Mestha.

Regarding claim 97, Yacoub teaches a distributed printing control apparatus (Yacoub, fig 5, virtual printer #610, also col 11, In 50-51, virtual printer may be hardware, also col 2, In 8-12, printing in a distributive manner), comprising:

A printer specification module that specifies multiple printers as destinations of distribution among all printers connecting with said distributed printing control apparatus to allow data transmission (Yacoub, col 4, ln 30-41, module checks user preferences and specifies multiple printers for distributed printing); and

A distribution control module, said distribution control module comprising:

A printer selection module that, when any trouble arises in any of the multiple printers specified by said printer specification module, selects one printer immediately available for printing (Yacoub, col 7, ln 19-21, when trouble arises, a new printer is selected for printing to continue) among all the printers except the printer with the trouble (Yacoub, col 6, ln 34-37, search for available printer while excluding troubled printer); and

A troubled-time output module that outputs a distributed portion of the print data to the printer selected by said printer selection module as an alternative printer for the printer with the trouble (Yacoub, col 7, ln 30-37, sends jobs to alternative printer and waits until job is complete).

Yacoub does not disclose expressly a distribution control module that outputs print data of interest, which is to be printed, in a distributive manner to the multiple printers specified by said printer specification module, nor does Yacoub disclose expressly a resulting print correcting module that makes a resulting print obtained from the alternative printer substantially equivalent to a resulting print expected from the printer with the trouble. Kato, however, teaches a distributed printing control apparatus comprising a distribution control module that outputs print data of interest, which is to be

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printed, in a distributive manner to the multiple printers specified by said printer specification module (Kato, col 5, ln 15-24, print job is printed in a distributive manner to multiple printers. Print data is output from the driver to the printers).

Yacoub and Kato are combinable because they are from a similar field of endeavor of distributed printing with virtual print drivers. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the distributed printing control apparatus of Kato outputting data in a distributive manner to multiple printers with the distributed printing control apparatus of Yacoub comprising a printer specification module and a distribution control module comprising a printer selection module and a troubled-time output module. The motivation for doing so would have been to relieve the user of the burdens of trying to find or select the most appropriate printer for the job (Yacoub, col 5, ln 1-2), as well as to provide a print control apparatus and method of automatically selecting an optimum printing device for distributed printing, thereby reducing the load on the operator in print processing (Kato, col 1, ln 48-58).

The combination of Yacoub and Kato teaches a distributed printing control apparatus comprising a printer specification module and a distribution control module for outputting print data to multiple printers, said distribution control module comprising a printer selection module and a troubled-time output module. The combination of Yacoub and Kato does not disclose expressly a distributed printing control apparatus further comprising a resulting print correcting module that makes a resulting print obtained from the alternative printer substantially equivalent to a resulting print expected

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from the printer with the trouble. Mestha, however, teaches a printing control apparatus comprising a resulting print correcting module that makes a resulting print obtained from an alternative printer substantially equivalent to a resulting print expected from the printer with the trouble (Mestha, col 5, ln 43-63, wherein data adjusting subsystem corrects output color gamut in printers. Based on an identical printer gamut, if the same image is output to a plurality of printers in a distributive manner, e.g. in the event of a troubled printer, the resulting print outputs will be identical, col 6, ln 15-21).

Yacoub, Kato, and Mestha are combinable because they are from a similar field of endeavor of printing to multiple printers. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the resulting print correcting module of Mestha with the a distributed printing control apparatus of Yacoub and Kato comprising a printer specification module and a distribution control module for outputting print data to multiple printers, said distribution control module comprising a printer selection module and a troubled-time output module. The motivation for doing so would have been to assure a consistent output regardless of the printers used. The suggestion for combining was given by Mestha in col 4, ln 14-17, which states the data adjusting subsystem may be combined into a network print server with multiple printers. Additionally, the suggestion for doing so was also given by Yacoub in col 10, ln 5-27, wherein an aspect of selecting an alternative printer comprises selecting, for example, the highest quality as a preference. By choosing quality as a constraining factor, the resulting print from each printer would be consistently of high quality, suggesting

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substantially equivalent outputs. Therefore, it would have been obvious to combine Mestha with Yacoub and Kato to obtain the invention as specified in claim 97.

Claim 76 recites identical features as claim 97 except claim 76 is a method claim. Thus, arguments similar to that presented above for claim 97 are equally applicable to claim 76.

Claim 96 recites identical features as claim 97 except claim 96 is a computer readable medium claim. Thus, arguments similar to that presented above for claim 97 are equally applicable to claim 97. Applicant's attention is further invited to col 5, ln 35-38 for a computer medium disclosed by Yacoub. Additionally see col 4, ln 18-25 of Mestha teaching implementing the resulting print correcting module in software.

Response to Arguments

In regards to the inclusion of certified copies of priority documents, the examiner thanks the applicants for the correction, and the request for certified foreign priority documents has been withdrawn.

The amendments to the title and specification have been accepted.

With respect to applicant's arguments regarding the 35 U.S.C. 101 rejections of claim 96, the examiner notes the applicant's amendment that allegedly overcomes the rejection. However, the computer program claimed is merely a set of instructions per se and are not clearly embodied on a computer-readable medium. Since the computer program is merely a set of instructions not embodied on a computer readable medium

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to realize the computer program functionality, the claimed subject matter is not statutory. See MPEP § 2106 IV.B.1.

Applicant's arguments, see pages 25-33, filed March 3, 2006, with respect to claims 1-11, 13-18, 21-32, 34-39, 41, 44-52, and 54-56 have been fully considered and are persuasive. The rejections of the aforementioned claims have been withdrawn.

Applicant's arguments, see pages 27-28 of Remarks, filed March 3, 2006, with respect to the rejection(s) of claim(s) 76, 96, and 97 under 35 U.S.C. 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Mestha et al.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The Muramatsu reference, US 5933576, is cited for teaching printing in a distributive manner with a consistent output.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dillon J. Murphy whose telephone number is (571) 272-5945. The examiner can normally be reached on M-F, 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly Williams can be reached on (571) 272-7471. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DJM

Handwritten signature of Dillon J. Murphy in black ink.Handwritten signature of Kimberly Williams in black ink.

**KIMBERLY WILLIAMS
SUPERVISORY PATENT EXAMINER**